

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/562,144
Source: IFWP
Date Processed by STIC: 12/20/2006

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/562, 144

CRF Edit Date: 12/20/2006
Edited by: DA

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other: Insert Amino Acid Numbering (85)



IFWO

RAW SEQUENCE LISTING

DATE: 12/20/2006

PATENT APPLICATION: US/10/562,144

TIME: 12:25:04

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

5 <110> APPLICANT: CASTANIA Sociedade Agroflorestal SA
 9 <120> TITLE OF INVENTION: Castanea sativa Mill. genes codifying for Allene Oxide
 Cyclase, Cystatin,
 10 B-1,3-Glucanase and Thaumatin-Like Protein and their use
 14 <130> FILE REFERENCE: 1
 C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/562,144
 C--> 20 <141> CURRENT FILING DATE: 2005-12-23
 22 <150> PRIOR APPLICATION NUMBER: PT 102979-S
 23 <151> PRIOR FILING DATE: 2003-06-26
 27 <160> NUMBER OF SEQ ID NOS: 3
 31 <170> SOFTWARE: PatentIn version 3.1
 37 <210> SEQ ID NO: 1
 39 <211> LENGTH: 735
 41 <212> TYPE: DNA
 43 <213> ORGANISM: Castanea sativa
 48 <400> SEQUENCE: 1
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 50 Met Ala Thr Val Ser Ser Ala Ser Ala Ala Leu Arg Thr Ile Ser Ser
 51 1 5 10 15
 53 tcc tca tcc aag cta tct tct gcc ttc caa act aaa aag atc caa tct 96
 54 Ser Ser Ser Lys Leu Ser Ser Ala Phe Gln Thr Lys Lys Ile Gln Ser
 55 20 25 30
 57 ttt aaa cta cct aac cct ctc att tct cag aat cat aaa ctt act acc 144
 58 Phe Lys Leu Pro Asn Pro Leu Ile Ser Gln Asn His Lys Leu Thr Thr
 59 35 40 45
 61 acc tct act act gct tcc aga tca ttt tcc tgc aag agc cag agc acc 192
 62 Thr Ser Thr Thr Ala Ser Arg Ser Phe Ser Cys Lys Ser Gln Ser Thr
 63 50 55 60
 65 tca aca gat tca act aac act gaa gtt caa gaa ctt agt gtc tat gag 240
 66 Ser Thr Asp Ser Thr Asn Thr Glu Val Gln Glu Leu Ser Val Tyr Glu
 67 65 70 75 80
 69 atc aat gaa cgt gat cgt gga agc cct gct tat ctt cga ttg agc caa 288
 70 Ile Asn Glu Arg Asp Arg Gly Ser Pro Ala Tyr Leu Arg Leu Ser Gln
 71 85 90 95
 73 aag act gtt aat tca ctc gga gat ctt gtc ccc ttt agc aac aag cta 336
 74 Lys Thr Val Asn Ser Leu Gly Asp Leu Val Pro Phe Ser Asn Lys Leu
 75 100 105 110
 77 tat act gca gat cta aag aag aga att gga ata aca gca gga ctc tgc 384
 78 Tyr Thr Ala Asp Leu Lys Lys Arg Ile Gly Ile Thr Ala Gly Leu Cys
 79 115 120 125
 81 att ctg atc aag cac gaa gaa gag aag aaa gga gat cgc tat gaa gct 432
 82 Ile Leu Ile Lys His Glu Glu Lys Lys Gly Asp Arg Tyr Glu Ala
 83 130 135 140
 85 gtt tac agc ttc tac ttc ggc gat tac ggt cat atc gcc gtt cag gga 480

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Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

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86 Val Tyr Ser Phe Tyr Phe Gly Asp Tyr Gly His Ile Ala Val Gln Gly
87 145                150                155                160
89 gcg tac tta acc tat gaa gaa act tac cta gcc gtc acc ggt gga tcc      528
90 Ala Tyr Leu Thr Tyr Glu Glu Thr Tyr Leu Ala Val Thr Gly Gly Ser
91                165                170                175
93 ggc ata ttt gca ggg gtt tcc ggt caa gtg aaa ttg cag caa ctc att      576
94 Gly Ile Phe Ala Gly Val Ser Gly Gln Val Lys Leu Gln Gln Leu Ile
95                180                185                190
97 ttc cct ttc aag cta ttt tac act ttt tac ttg aag ggg atc ccc ggt      624
98 Phe Pro Phe Lys Leu Phe Tyr Thr Phe Tyr Leu Lys Gly Ile Pro Gly
99                195                200                205
101 ctg cca tct gaa ttg ttg tgt acg gcg gtt cct ccg tcg ccg acg gtg      672
102 Leu Pro Ser Glu Leu Leu Cys Thr Ala Val Pro Pro Ser Pro Thr Val
103                210                215                220
105 gag cca aca cct gaa gct aaa gct tgt gag gaa ggg gcc gca ctg aaa      720
106 Glu Pro Thr Pro Glu Ala Lys Ala Cys Glu Glu Gly Ala Ala Leu Lys
107 225                230                235                240
109 aat tac act aat taa      735
110 Asn Tyr Thr Asn
114 <210> SEQ ID NO: 2
116 <211> LENGTH: 244
118 <212> TYPE: PRT
120 <213> ORGANISM: Castanea sativa
124 <400> SEQUENCE: 2
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127 1                5                10                15
130 Ser Ser Ser Lys Leu Ser Ser Ala Phe Gln Thr Lys Lys Ile Gln Ser
131                20                25                30
134 Phe Lys Leu Pro Asn Pro Leu Ile Ser Gln Asn His Lys Leu Thr Thr
135                35                40                45
138 Thr Ser Thr Thr Ala Ser Arg Ser Phe Ser Cys Lys Ser Gln Ser Thr
139                50                55                60
142 Ser Thr Asp Ser Thr Asn Thr Glu Val Gln Glu Leu Ser Val Tyr Glu
143 65                70                75                80
146 Ile Asn Glu Arg Asp Arg Gly Ser Pro Ala Tyr Leu Arg Leu Ser Gln
147                85                90                95
150 Lys Thr Val Asn Ser Leu Gly Asp Leu Val Pro Phe Ser Asn Lys Leu
151                100               105               110
154 Tyr Thr Ala Asp Leu Lys Lys Arg Ile Gly Ile Thr Ala Gly Leu Cys
155                115               120               125
158 Ile Leu Ile Lys His Glu Glu Glu Lys Lys Gly Asp Arg Tyr Glu Ala
159                130               135               140
162 Val Tyr Ser Phe Tyr Phe Gly Asp Tyr Gly His Ile Ala Val Gln Gly
163 145                150                155                160
166 Ala Tyr Leu Thr Tyr Glu Glu Thr Tyr Leu Ala Val Thr Gly Gly Ser
167                165                170                175
170 Gly Ile Phe Ala Gly Val Ser Gly Gln Val Lys Leu Gln Gln Leu Ile
171                180                185                190
174 Phe Pro Phe Lys Leu Phe Tyr Thr Phe Tyr Leu Lys Gly Ile Pro Gly

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/562,144

DATE: 12/20/2006

TIME: 12:25:04

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

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175          195          200          205
178 Leu Pro Ser Glu Leu Leu Cys Thr Ala Val Pro Pro Ser Pro Thr Val
179          210          215          220
182 Glu Pro Thr Pro Glu Ala Lys Ala Cys Glu Glu Gly Ala Ala Leu Lys
183 225          230          235          240
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192 <211> LENGTH: 318
194 <212> TYPE: DNA
196 <213> ORGANISM: Castanea sativa
201 <400> SEQUENCE: 3
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203 Met Arg Lys Leu Ala Ala Leu Val Gly Gly Val Ser Asp Val Lys Gly
204 1          5          10          15
206 cat gag aac agc ttg cag atc gac gac ctc gct cgt ttt gct gtc gac      96
207 His Glu Asn Ser Leu Gln Ile Asp Asp Leu Ala Arg Phe Ala Val Asp
208          20          25          30
210 gac cac aac aag aaa gcg aat aca ctg ctg cag ttt aag aag gtg gtg      144
211 Asp His Asn Lys Lys Ala Asn Thr Leu Leu Gln Phe Lys Lys Val Val
212          35          40          45
214 aat gcg aaa cag cag gtg gtt tct gga aca ata tac att cta acg ttg      192
215 Asn Ala Lys Gln Gln Val Val Ser Gly Thr Ile Tyr Ile Leu Thr Leu
216          50          55          60
218 gag gtg gag gat ggc ggg aag aag aaa gtt tat gaa gcc aag att tgg      240
219 Glu Val Glu Asp Gly Gly Lys Lys Lys Val Tyr Glu Ala Lys Ile Trp
220 65          70          75          80
222 gag aag cca tgg ttg aac ttc aag gag gtg cag gaa ttt aag ctc att      288
223 Glu Lys Pro Trp Leu Asn Phe Lys Glu Val Gln Glu Phe Lys Leu Ile
224          85          90          95
226 ggt gat gcc cct aca cac cat agt gct taa      318
227 Gly Asp Ala Pro Thr His His Ser Ala
228          100          105
231 <210> SEQ ID NO: 4
233 <211> LENGTH: 105
235 <212> TYPE: PRT
237 <213> ORGANISM: Castanea sativa
241 <400> SEQUENCE: 4
243 Met Arg Lys Leu Ala Ala Leu Val Gly Gly Val Ser Asp Val Lys Gly
244 1          5          10          15
247 His Glu Asn Ser Leu Gln Ile Asp Asp Leu Ala Arg Phe Ala Val Asp
248          20          25          30
251 Asp His Asn Lys Lys Ala Asn Thr Leu Leu Gln Phe Lys Lys Val Val
252          35          40          45
255 Asn Ala Lys Gln Gln Val Val Ser Gly Thr Ile Tyr Ile Leu Thr Leu
256          50          55          60
259 Glu Val Glu Asp Gly Gly Lys Lys Lys Val Tyr Glu Ala Lys Ile Trp
260 65          70          75          80
263 Glu Lys Pro Trp Leu Asn Phe Lys Glu Val Gln Glu Phe Lys Leu Ile
264          85          90          95

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DATE: 12/20/2006

PATENT APPLICATION: US/10/562,144

TIME: 12:25:04

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

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267 Gly Asp Ala Pro Thr His His Ser Ala
268           100           105
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273 <211> LENGTH: 927
275 <212> TYPE: DNA
277 <213> ORGANISM: Castanea sativa
283 <400> SEQUENCE: 5
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286 1           5           10           15
288 tct aac att gaa gtc atg cta ggt gtc cca aac tca gac ctt caa agc      96
289 Ser Asn Ile Glu Val Met Leu Gly Val Pro Asn Ser Asp Leu Gln Ser
290           20           25           30
292 ctt gcc aac cct tcc aat gca caa gca tgg gta caa aga aac gta ctt      144
293 Leu Ala Asn Pro Ser Asn Ala Gln Ala Trp Val Gln Arg Asn Val Leu
294           35           40           45
296 aac ttc tgg cct agt gtc agg ttt cga tac att gca gtt gga aat gaa      192
297 Asn Phe Trp Pro Ser Val Arg Phe Arg Tyr Ile Ala Val Gly Asn Glu
298           50           55           60
300 gtg agt cct gtt aat gga ggc aca gct ggg tta gca caa att gtt ctc      240
301 Val Ser Pro Val Asn Gly Gly Thr Ala Gly Leu Ala Gln Ile Val Leu
302 65           70           75           80
304 cct gcc tta acc aac gta ttc aat gca att aga tca gct ggc ctt aag      288
305 Pro Ala Leu Thr Asn Val Phe Asn Ala Ile Arg Ser Ala Gly Leu Lys
306           85           90           95
308 gac caa atc cag gtt tca att gca att gac atg acc tta ata gga aac      336
309 Asp Gln Ile Gln Val Ser Ile Ala Ile Asp Met Thr Leu Ile Gly Asn
310           100          105          110
312 tcc tat cct ccg tca gca ggg gct ttc aga ggt gat gtt aga tca tat      384
313 Ser Tyr Pro Pro Ser Ala Gly Ala Phe Arg Gly Asp Val Arg Ser Tyr
314           115          120          125
316 tta gac cca atc att ggt cac cta gta tat gct aag gca ccc tta cta      432
317 Leu Asp Pro Ile Ile Gly His Leu Val Tyr Ala Lys Ala Pro Leu Leu
318           130          135          140
320 gcc aat gtg tac act tat ttt agc tat gct gga aat cca cgc gac att      480
321 Ala Asn Val Tyr Thr Tyr Phe Ser Tyr Ala Gly Asn Pro Arg Asp Ile
322 145           150          155          160
324 tct ctt ccc tat gct ttg ttt act tcc cca tca gtt gtg gca tgg gat      528
325 Ser Leu Pro Tyr Ala Leu Phe Thr Ser Pro Ser Val Val Ala Trp Asp
326           165          170          175
328 ggt cct aag gga tac caa aac ctt ttt gat gca atg atg gat gca ttg      576
329 Gly Pro Lys Gly Tyr Gln Asn Leu Phe Asp Ala Met Met Asp Ala Leu
330           180          185          190
332 tac tca gct ctc gag agg tcg tgg ggc ggt tca ttg gag gtt gtt gtt      624
333 Tyr Ser Ala Leu Glu Arg Ser Trp Gly Gly Ser Leu Glu Val Val Val
334           195          200          205
336 tca gag agt gga tgg cca tca gca gca ggt gga ttc gct aca tca ttt      672
337 Ser Glu Ser Gly Trp Pro Ser Ala Ala Gly Gly Phe Ala Thr Ser Phe
338           210          215          220

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/562,144

DATE: 12/20/2006

TIME: 12:25:04

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

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340 gat aat gca cgt act tat tac tca aat ttg att aag cat gtc aaa ggg      720
341 Asp Asn Ala Arg Thr Tyr Tyr Ser Asn Leu Ile Lys His Val Lys Gly
342 225                230                235                240
344 ggt aca cca aag agg cct ggg gga gct ata gag acc tat ctt ttt gcc      768
345 Gly Thr Pro Lys Arg Pro Gly Gly Ala Ile Glu Thr Tyr Leu Phe Ala
346                245                250                255
348 atg ttt aat gag aat cag aaa caa cca gag cta gag aaa aac ttt ggc      816
349 Met Phe Asn Glu Asn Gln Lys Gln Pro Glu Leu Glu Lys Asn Phe Gly
350                260                265                270
352 tta ttc ttc cca aat aaa cag ccc aaa ttt aac ctc aat ttt ggt gga      864
353 Leu Phe Phe Pro Asn Lys Gln Pro Lys Phe Asn Leu Asn Phe Gly Gly
354                275                280                285
356 gaa aga atc tgg gat gtc act gct gaa tat aat gca aca gtt tcc ctc      912
357 Glu Arg Ile Trp Asp Val Thr Ala Glu Tyr Asn Ala Thr Val Ser Leu
358 290                295                300
360 agt agt gat atg taa      927
361 Ser Ser Asp Met
362 305
365 <210> SEQ ID NO: 6
367 <211> LENGTH: 308
369 <212> TYPE: PRT
371 <213> ORGANISM: Castanea sativa
375 <400> SEQUENCE: 6
377 Met Arg Ile Tyr Asp Pro Asn Gln Ala Val Leu Gln Ala Leu Arg Gly
378 1                5                10                15
381 Ser Asn Ile Glu Val Met Leu Gly Val Pro Asn Ser Asp Leu Gln Ser
382                20                25                30
385 Leu Ala Asn Pro Ser Asn Ala Gln Ala Trp Val Gln Arg Asn Val Leu
386 35                40                45
389 Asn Phe Trp Pro Ser Val Arg Phe Arg Tyr Ile Ala Val Gly Asn Glu
390 50                55                60
393 Val Ser Pro Val Asn Gly Gly Thr Ala Gly Leu Ala Gln Ile Val Leu
394 65                70                75                80
397 Pro Ala Leu Thr Asn Val Phe Asn Ala Ile Arg Ser Ala Gly Leu Lys
398                85                90                95
401 Asp Gln Ile Gln Val Ser Ile Ala Ile Asp Met Thr Leu Ile Gly Asn
402                100               105               110
405 Ser Tyr Pro Pro Ser Ala Gly Ala Phe Arg Gly Asp Val Arg Ser Tyr
406                115               120               125
409 Leu Asp Pro Ile Ile Gly His Leu Val Tyr Ala Lys Ala Pro Leu Leu
410                130               135               140
413 Ala Asn Val Tyr Thr Tyr Phe Ser Tyr Ala Gly Asn Pro Arg Asp Ile
414 145                150               155               160
417 Ser Leu Pro Tyr Ala Leu Phe Thr Ser Pro Ser Val Val Ala Trp Asp
418                165               170               175
421 Gly Pro Lys Gly Tyr Gln Asn Leu Phe Asp Ala Met Met Asp Ala Leu
422                180               185               190
425 Tyr Ser Ala Leu Glu Arg Ser Trp Gly Gly Ser Leu Glu Val Val Val
426                195               200               205

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/562,144

DATE: 12/20/2006
TIME: 12:25:05

Input Set : A:\pto.da.txt
Output Set: N:\CRF4\12202006\J562144.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 9

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/562,144

DATE: 12/20/2006

TIME: 12:25:05

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\12202006\J562144.raw

L:18 M:270 C: Current Application Number differs, Replaced Application Number

L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date

**Raw Sequence Listing before editing
(for reference only)**



IFWP

RAW SEQUENCE LISTING

DATE: 12/14/2006

PATENT APPLICATION: US/10/562,144

TIME: 08:44:00

Input Set : A:\PTO.SS.txt

Output Set: N:\CRF4\12142006\J562144.raw

5 <110> APPLICANT: CASTANIA Sociedade Agroflorestal SA
 9 <120> TITLE OF INVENTION: Castanea sativa Mill. genes codifying for Allene Oxide
 Cyclase, Cystatin,
 10 B-1,3-Glucanase and Thaumatin-Like Protein and their use
 14 <130> FILE REFERENCE: 1
 C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/562,144
 C--> 20 <141> CURRENT FILING DATE: 2005-12-23
 22 <150> PRIOR APPLICATION NUMBER: PT 102979-S
 23 <151> PRIOR FILING DATE: 2003-06-26
 27 <160> NUMBER OF SEQ ID NOS: 8
 31 <170> SOFTWARE: PatentIn version 3.1

Does Not Comply
 Corrected Diskette Needed

CP3-1)

ERRORED SEQUENCES

534 <210> SEQ ID NO: 8
 536 <211> LENGTH: 226
 538 <212> TYPE: PRT
 540 <213> ORGANISM: Castanea sativa
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 551 20 25 30
 554 Thr Ile Trp Pro Gly Thr Leu Thr Ser Asp Gln Lys Pro Gln Leu Ser
 555 35 40 45
 558 Lys Thr Gly Phe Glu Leu Ala Ser Lys Ala Ser Leu Thr Leu Glu Cys
 559 50 55 60
 562 Ser Ser Ser Met Glu Arg Pro Val Leu Gly Pro Asn Pro Met His His
 563 65 70 75 80
 566 Gln Ile Arg Lys Val His Leu Arg Asp Cys His Arg Ser Gly Cys Met Gln
 E--> 567 85 90 95
 570 Trp Arg Cys Asn Pro Thr Ser Phe Phe Ser Arg Asn Gln His Ser Ser Gln
 571 100 105 110
 574 Ser Trp Asp Gly Leu Leu Pro Cys Arg Trp Leu Gln Leu Ala Cys Phe Cys
 575 115 120 125 130
 578 Ser His Gln Arg Arg His Trp Leu Gln Gly His Lys Leu Ser Ser Cys Glu
 579 135 140 145
 582 Arg Ser Leu Pro Ser Gly Ile Thr Ser Glu Arg Val Trp Glu Arg Ala Cys
 583 150 155 160 165
 586 Leu Gln Glu Arg Leu Tyr Cys Phe Gln Ser Thr Thr Val Leu Leu His Trp
 587 170 175 180
 590 Cys Ile His Pro Glu Asn Met Ser Thr His Lys Ile Phe Ser His Leu Ala
 591 185 190 195

RAW SEQUENCE LISTING

DATE: 12/14/2006

PATENT APPLICATION: US/10/562,144

TIME: 08:44:00

Input Set : A:\PTO.SS.txt

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594	Thr	Met	Ser	Ser	Ser	Leu	Ser	Tyr	Gln	His	Leu	Tyr	Leu	Leu	Lys	Cys	Thr
595	200					205					210					215	
598	Arg	Leu	Cys	Tyr	Arg	Ile	Leu	Ser	Ile	Asn							
599				220					225								

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/562,144

DATE: 12/14/2006
TIME: 08:44:01

Input Set : A:\PTO.SS.txt
Output Set: N:\CRF4\12142006\J562144.raw

Invalid Line Length:

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Seq#:1; Line(s) 9

VERIFICATION SUMMARY

PATENT APPLICATION: **US/10/562,144**

DATE: 12/14/2006

TIME: 08:44:01

Input Set : **A:\PTO.SS.txt**

Output Set: **N:\CRF4\12142006\J562144.raw**

L:18 M:270 C: Current Application Number differs, Replaced Application Number

L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:567 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:8